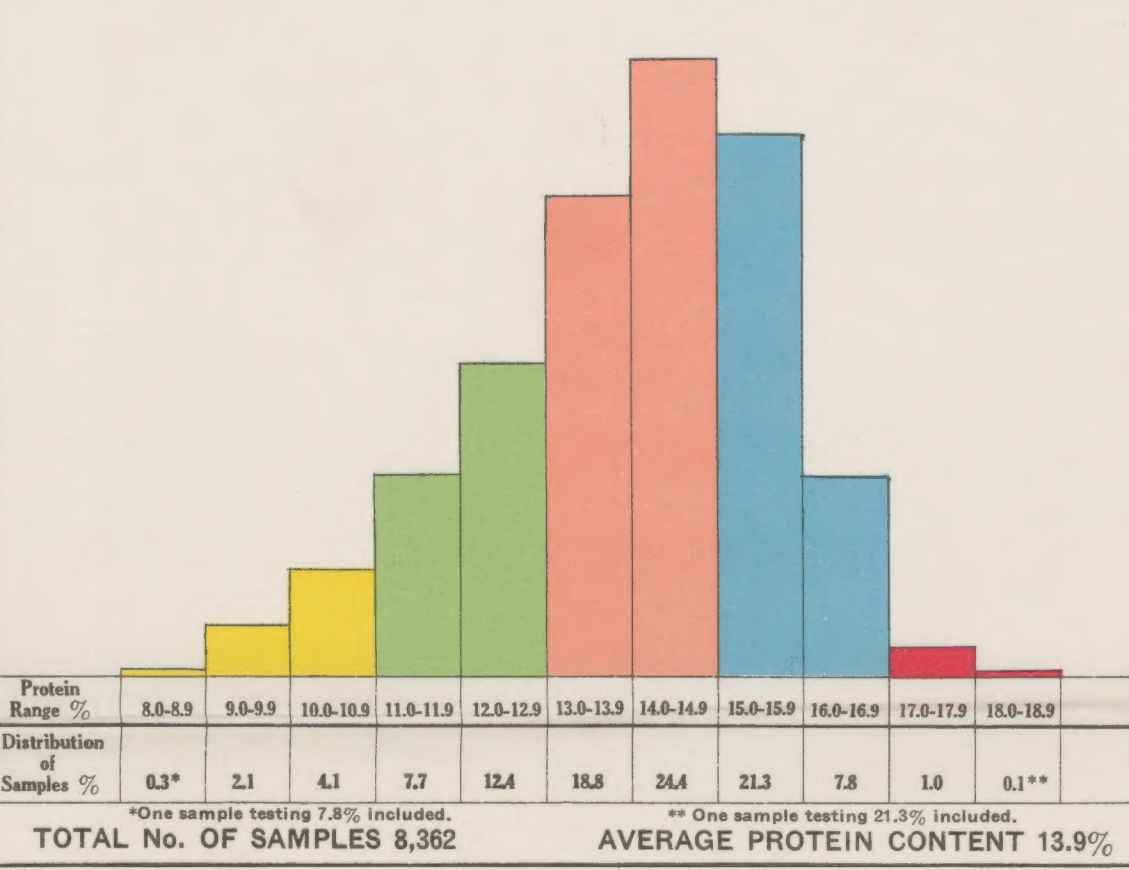


Key and diagrammatic representation of the distribution of the samples tested, showing the percentage falling within each one per cent range in protein content.



EXPLANATORY NOTE

The Protein Survey Map is based upon the analyses of 8,362 samples of wheat from 1,602 shipping points in the three Prairie Provinces, the samples being obtained through the co-operation of the Grain Inspection Branch, line elevator companies, experiment stations and producers. The protein estimations were conducted according to the Kjeldahl-Gunning-Arnold method using a one-grain sample, the results being computed on a 13.5 per cent moisture basis. The individual results were plotted on a large map by means of colored pins, one per cent protein ranges being employed for this purpose. This was used as a basis for dividing the area into zones differing in protein content. While every effort has been made to produce a map as accurate as possible, it should be pointed out that the border lines are arbitrary since there is a general tendency for a gradation in protein content from one district to another; also, incidental samples occur within each zone which are beyond the ranges shown in the protein distribution diagram. The uncoloured areas represent districts from which no samples of the grades included in the survey could be obtained. These areas are particularly extensive in the present survey due to excessive rust or frost damage.

In regard to the Average values recorded in the Table it should be borne in mind that these are based solely on the number of samples tested and do not take into consideration the relative volumes of wheat produced in the various districts.

A mimeographed report showing the detailed results from individual shipping points has been prepared and may be obtained upon request.

PROTEIN CONTENT BY GRADES AND PROVINCES

Grade	No. of Samples Tested	Protein Content (N.x5.7)	
		Mean %	Range %
Province of Manitoba			
1 Hard	41	13.9	11.2 to 16.3
1 Northern	72	13.1	10.4 — 15.8
3 Northern	162	13.0	8.8 — 16.2
4 Northern	201	13.0	8.9 — 16.7
4 Special	203	13.0	8.3 — 15.8
1 C.W. Garnet	1	10.5	—
2 C.W. Garnet	4	10.6	9.1 — 13.9

Province of Saskatchewan

1 Hard	30	15.2	13.9 to 16.5
1 Northern	898	14.9	10.7 — 18.0
2 Northern	1155	14.6	9.8 — 18.0
3 Northern	1458	13.8	8.3 — 18.3
4 Northern	1264	13.9	9.0 — 21.3
4 Special	435	13.5	9.9 — 17.3
1 C.W. Garnet	11	11.0	8.4 — 16.3
2 C.W. Garnet	228	11.3	7.8 — 16.4

Province of Alberta

1 Hard	137	14.4	11.7 to 16.8
1 Northern	654	14.6	10.6 — 18.3
2 Northern	393	14.3	8.1 — 17.8
3 Northern	463	13.4	8.8 — 17.6
4 Northern	427	13.5	8.9 — 17.5
1 C.W. Garnet	9	10.4	9.3 — 12.9
2 C.W. Garnet	59	11.5	9.0 — 15.7

PROTEIN CONTENT BY GRADES

Grade	No. of Samples Tested	Protein Content (N.x5.7)	
		Mean %	Range %
1 Hard	167	14.6	11.7 to 16.8
1 Northern	1593	14.7	10.6 — 18.3
2 Northern	1620	14.5	8.1 — 18.0
3 Northern	2083	13.6	8.3 — 18.3
4 Northern	1892	13.7	8.9 — 21.3
4 Special	638	13.3	8.3 — 17.3
1 C.W. Garnet	78	10.9	8.4 — 16.3
2 C.W. Garnet	291	11.4	7.8 — 16.4

PROTEIN CONTENT BY PROVINCES

Province	No. of Samples Tested	Protein Content (N.x5.7)	
		Mean %	Range %
Manitoba	684	13.0	8.3 to 16.7
Saskatchewan	5536	14.0	7.8 — 21.3
Alberta	2142	14.0	8.1 — 18.3

PROTEIN CONTENT WESTERN CANADA

No. of Samples Tested	Protein Content (N.x5.7)	
	Mean %	Range %
8362	13.9	7.8 to 21.3

All results computed on a 13.5% moisture basis.

Base Map Copyright, Canada, by Stovel Company, Ltd., 1934.

WILLIAM C. WONDERS
MAP COLLECTION
Univ. of Alberta Library

Prairie Provinces J-28 (1935) [arch]